

SEQUENCE LISTING

<110> The Kitasato Institute
 Motokawa, Kenji
 Kusuhara, Hajime
 Koyama, Hiroyuki
 Hohdatsu, Tsutomu
 Arai, Setsuo

<120> FELINE INFECTIOUS PERITONITIS VACCINE

<130> 082368-002100US

<150> PCT/JP03/08524

<151> 2003-07-04

<150> JP 2002-196290

<151> 2002-07-04

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1134

<212> DNA

<213> Feline infectious peritonitis virus

<400> 1

```

atggccacac agggacaacg cgtcaactgg ggagatgaac cttccaaaag acgtgatcgt 60
tctaactctc gtggtcggaa gaataataat atacctcttt cattcttcaa ccccaccacc 120
ctcgaacaag gagctaaatt ttggtatgta tgtccgagag actttgttcc caagggaata 180
ggtaataagg atcaacaaat tggttattgg aacagacagg cgcgctttcg cattgtcaag 240
ggtcagcgta aggaactccc tgagagatgg tttttctatt tcttaggtac aggacctcat 300
gctgatgcta aatttaaaga taagattgat ggagtcttct gggttgcaaa ggatgggtgcc 360
atgaacaagc caacatcact tggcactcgt ggaaccaaca atgaatccga accattgaga 420
tttgatggta agataccacc acaattccag cttgaagtaa accgttctag gaataattca 480
aggtctgggt ctcagtctag atctggctca agaaacaggt ctcaatccag gggaagacaa 540
caatccaata accagaatac taatgttgag gatacaattg tagctgtgct tcagaaatta 600
gggtgttactg acaagcaaag gtcacgttct aaatctagag accgtagtga ctctaaatct 660
agagacacaa cacctaaaaa cgccaacaaa cacacctgga agaaaactgc aggttaagggt 720
gatgtgacaa atttctttgg tgctagaagt gcttcggcta acttttgtga tagtgatctc 780
gttgccaatg gtaacgctgc caaatgctac cctcagatag ccgaatgcgt tccatcagta 840
tctagcgtgc tcttcggtag tcaatgggtc gctgaagaag ctggagatca agtgaaagtc 900
acacttactc acacctacta cctgccaaaa ggtgatgcca aaaccagtca attcctagaa 960
cagattgacg cttacaagcg cccttcacaa gtagctaagg aacagaggaa accaaagcct 1020
cgctctaagt ctgctgataa gaagcctgag gaattgtctg taactcttgt agaggcatac 1080
acagatgtgt ttgatgacac acaggttgag atgattgatg aggttacgaa ctaa 1134

```

<210> 2

<211> 377

<212> PRT

<213> Feline infectious peritonitis virus

<400> 2

```

Met Ala Thr Gln Gly Gln Arg Val Asn Trp Gly Asp Glu Pro Ser Lys
  1                      5                      10                      15
Arg Arg Asp Arg Ser Asn Ser Arg Gly Arg Lys Asn Asn Asn Ile Pro
  20                      25                      30

```

Leu	Ser	Phe	Phe	Asn	Pro	Thr	Thr	Leu	Glu	Gln	Gly	Ala	Lys	Phe	Trp	
		35					40					45				
Tyr	Val	Cys	Pro	Arg	Asp	Phe	Val	Pro	Lys	Gly	Ile	Gly	Asn	Lys	Asp	
	50					55					60					
Gln	Gln	Ile	Gly	Tyr	Trp	Asn	Arg	Gln	Ala	Arg	Phe	Arg	Ile	Val	Lys	
65					70					75					80	
Gly	Gln	Arg	Lys	Glu	Leu	Pro	Glu	Arg	Trp	Phe	Phe	Tyr	Phe	Leu	Gly	
				85					90					95		
Thr	Gly	Pro	His	Ala	Asp	Ala	Lys	Phe	Lys	Asp	Lys	Ile	Asp	Gly	Val	
			100					105					110			
Phe	Trp	Val	Ala	Lys	Asp	Gly	Ala	Met	Asn	Lys	Pro	Thr	Ser	Leu	Gly	
		115					120					125				
Thr	Arg	Gly	Thr	Asn	Asn	Glu	Ser	Glu	Pro	Leu	Arg	Phe	Asp	Gly	Lys	
	130					135						140				
Ile	Pro	Pro	Gln	Phe	Gln	Leu	Glu	Val	Asn	Arg	Ser	Arg	Asn	Asn	Ser	
145					150					155					160	
Arg	Ser	Gly	Ser	Gln	Ser	Arg	Ser	Gly	Ser	Arg	Asn	Arg	Ser	Gln	Ser	
				165					170					175		
Arg	Gly	Arg	Gln	Gln	Ser	Asn	Asn	Gln	Asn	Thr	Asn	Val	Glu	Asp	Thr	
			180					185					190			
Ile	Val	Ala	Val	Leu	Gln	Lys	Leu	Gly	Val	Thr	Asp	Lys	Gln	Arg	Ser	
		195					200					205				
Arg	Ser	Lys	Ser	Arg	Asp	Arg	Ser	Asp	Ser	Lys	Ser	Arg	Asp	Thr	Thr	
	210					215						220				
Pro	Lys	Asn	Ala	Asn	Lys	His	Thr	Trp	Lys	Lys	Thr	Ala	Gly	Lys	Gly	
225					230					235					240	
Asp	Val	Thr	Asn	Phe	Phe	Gly	Ala	Arg	Ser	Ala	Ser	Ala	Asn	Phe	Gly	
				245					250					255		
Asp	Ser	Asp	Leu	Val	Ala	Asn	Gly	Asn	Ala	Ala	Lys	Cys	Tyr	Pro	Gln	
			260					265					270			
Ile	Ala	Glu	Cys	Val	Pro	Ser	Val	Ser	Ser	Val	Leu	Phe	Gly	Ser	Gln	
		275					280					285				
Trp	Ser	Ala	Glu	Glu	Ala	Gly	Asp	Gln	Val	Lys	Val	Thr	Leu	Thr	His	
	290					295					300					
Thr	Tyr	Tyr	Leu	Pro	Lys	Gly	Asp	Ala	Lys	Thr	Ser	Gln	Phe	Leu	Glu	
305					310					315					320	
Gln	Ile	Asp	Ala	Tyr	Lys	Arg	Pro	Ser	Gln	Val	Ala	Lys	Glu	Gln	Arg	
				325					330					335		
Lys	Pro	Lys	Pro	Arg	Ser	Lys	Ser	Ala	Asp	Lys	Lys	Pro	Glu	Glu	Leu	
			340					345					350			
Ser	Val	Thr	Leu	Val	Glu	Ala	Tyr	Thr	Asp	Val	Phe	Asp	Asp	Thr	Gln	
		355					360					365				
Val	Glu	Met	Ile	Asp	Glu	Val	Thr	Asn								
	370					375										

<210> 3

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificially synthesized primer sequence

<400> 3

ggggaattca attaaaggca actactgcca

30

<210> 4

<211> 41

<212> DNA

<213> Artificial Sequence

<220>
<223> Artificially synthesized primer sequence

<400> 4
ctgtgaattc tgcaggatcc tttttttttt tttttttttt t 41

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificially synthesized primer sequence

<400> 5
caactgggga gatgaacctt 20

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificially synthesized primer sequence

<400> 6
ggtagcattt ggcagcgta 20

<210> 7
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificially synthesized primer sequence

<400> 7
attgatggag tcttctgggt tg 22

<210> 8
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificially synthesized primer sequence

<400> 8
ttggcattct taggtgttgt gtc 23